

SEQUENCE LISTING

<110> Evotec.NeuroSciences GmbH

<120> Diagnostic and therapeutic use of steroidogenic acute regulatory protein for neurodegenerative diseases

<130> 031347wo ME/BM

<140>

<141>

<160> 14

<170> PatentIn Ver. 2.1

<210> 1

<211> 285

<212> PRT

<213> Homo sapiens

<400> 1

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Leu | Leu | Ala | Thr | Phe | Lys | Leu | Cys | Ala | Gly | Ser | Ser | Tyr | Arg | His |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Arg | Asn | Met | Lys | Gly | Leu | Arg | Gln | Gln | Ala | Val | Met | Ala | Ile | Ser |
| | | 20 | | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Glu | Leu | Asn | Arg | Arg | Ala | Leu | Gly | Gly | Pro | Thr | Pro | Ser | Thr | Trp |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Asn | Gln | Val | Arg | Arg | Arg | Ser | Ser | Leu | Leu | Gly | Ser | Arg | Leu | Glu |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Thr | Leu | Tyr | Ser | Asp | Gln | Glu | Leu | Ala | Tyr | Leu | Gln | Gln | Gly | Glu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Ala | Met | Gln | Lys | Ala | Leu | Gly | Ile | Leu | Ser | Asn | Gln | Glu | Gly | Trp |
| | | | | 85 | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Lys | Glu | Ser | Gln | Gln | Asp | Asn | Gly | Asp | Lys | Val | Met | Ser | Lys | Val |
| | | 100 | | | | | | 105 | | | | | 110 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Pro | Asp | Val | Gly | Lys | Val | Phe | Arg | Leu | Glu | Val | Val | Val | Asp | Gln |
| | | 115 | | | | | 120 | | | | | 125 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Met | Glu | Arg | Leu | Tyr | Glu | Glu | Leu | Val | Glu | Arg | Met | Glu | Ala | Met |
| | 130 | | | | | 135 | | | | | 140 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Glu | Trp | Asn | Pro | Asn | Val | Lys | Glu | Ile | Lys | Val | Leu | Gln | Lys | Ile |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Lys | Asp | Thr | Phe | Ile | Thr | His | Glu | Leu | Ala | Ala | Glu | Ala | Ala | Gly |
| | | | | 165 | | | | | 170 | | | | | 175 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Leu | Val | Gly | Pro | Arg | Asp | Phe | Val | Ser | Val | Arg | Cys | Ala | Lys | Arg |
| | | | 180 | | | | | 185 | | | | | 190 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Gly | Ser | Thr | Cys | Val | Leu | Ala | Gly | Met | Asp | Thr | Asp | Phe | Gly | Asn |
| | | 195 | | | | | 200 | | | | | 205 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Pro | Glu | Gln | Lys | Gly | Val | Ile | Arg | Ala | Glu | His | Gly | Pro | Thr | Cys |
| | 210 | | | | | 215 | | | | | 220 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Val | Leu | His | Pro | Leu | Ala | Gly | Ser | Pro | Ser | Lys | Thr | Lys | Leu | Thr |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |

Trp Leu Leu Ser Ile Asp Leu Lys Gly Trp Leu Pro Lys Ser Ile Ile
245 250 255

Asn Gln Val Leu Ser Gln Thr Gln Val Asp Phe Ala Asn His Leu Arg
260 265 270

Lys Arg Leu Glu Ser His Pro Ala Ser Glu Ala Arg Cys
275 280 285

<210> 2

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer for the human StAR gene

<400> 2

ccaatgtcaa ggagatcaag gtc

23

<210> 3

<211> 23

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer for the human StAR gene

<400> 3

gccagctcgt gagtaatgaa tgt

23

<210> 4

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer for the cyclophilin B gene

<400> 4

actgaagcac tacgggcctg

20

<210> 5

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer for the cyclophilin B gene

<400> 5

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19

<210> 6

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer for the
gene of the ribosomal protein S9

<400> 6

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20

<210> 7

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer for the
gene of the ribosomal protein S9

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22

<210> 8

<211> 19

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer for the
beta-acin gene

<400> 8

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19

<210> 9

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer for the
beta-acin gene

<400> 9

ggcaagggac ttcctgtaa

19

<210> 10

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer for the
GAPDH gene

<400> 10

cgtcatgggt gtgaaccatg

20

<210> 11

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer for the

GAPDH gene

<400> 11
gctaagcagt tgggtggtgca g

21

<210> 12
<211> 21
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer for the
gene of the transferrin receptor (TRR)

<400> 12
gtcgcgtggtc agttcgtgat t

21

<210> 13
<211> 23
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer for the
gene of the transferrin receptor (TRR)

<400> 13
agcagttggc tgttgtagct ctc

23

<210> 14
<211> 23
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<213> Artificial Sequence

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<223> Description of Artificial Sequence: cDNA fragment
(nt 616-638) of human StAR

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23